

SECTION 10. FLIGHTCREW RECURRENT TRAINING CURRICULUMS

599. GENERAL. This section contains information, direction, and guidance to be used by POI's in the evaluation of an operator's flightcrew recurrent training curriculums. The information covered includes the objectives and content of these recurrent training curriculums. The recurrent category of training is conducted for flight crewmembers who have been previously trained and qualified by the operator, who are continuing to serve in the same duty position and aircraft type, and who must receive recurring training and/or checking within a specific eligibility period to maintain currency. Parts 121 and 135 flightcrew recurrent curriculums contain the following curriculum segments: aircraft ground training, general emergency training, flight training, and qualification. Special operations and differences training curriculum segments must also be included when applicable.

601. OBJECTIVE OF RECURRENT TRAINING. The objective of recurrent training is to ensure that flight crewmembers continue to be knowledgeable of, and proficient in, their specific aircraft type and duty assignment. Periodic recurrent training also provides operators with an opportunity to introduce crewmembers to changes in company operating procedures, in crewmember duties and responsibilities, and in developments within the operating environment and aviation industry.

A. POI's must ensure that the operator conducts the required number of hours of training for each cycle of recurrent training, and within the time period specified by the FAR's. Furthermore, POI's must take into account that although an operator may have satisfied the FAR's, the operator may not have satisfied the objective. The POI can consider the objective to have been met when the crewmember is able to perform at the required standard of proficiency immediately before entering the next cycle of required training.

B. POI's shall review recurrent training curriculum segments to ensure that the subject matter is appropriate, and of the proper scope and depth. The training given by the operator in each segment must meet the objective of that segment. Since there are limits as to the amount of recurrent training operators can reasonably conduct, POI's must ensure that operators use the time allocated for recurrent training efficiently and effectively. POI's

and operators should carefully consider the following:

(1) The FAR's require that all required subjects and topics in initial training be covered in recurrent training. Crewmembers must remain proficient in these subjects as long as they continue to serve in the aircraft and crew position. Operators must give sufficient training to ensure that crewmembers continually remain proficient. The training required to meet this objective must be given even if it is in excess of the scheduled hours or listed topics.

(2) The FAR's do not require that every subject and topic of training be reviewed during each cycle of training. POI's should encourage operators to construct recurrent training outlines with different topics and elements emphasized in each cycle of training, so that when an element is addressed, it may be addressed in adequate depth.

(3) Recurrent training curriculum segments may not contain material that is not pertinent to flightcrew aircraft training, ground training, flight training, and general emergency training requirements (such as security training - a separate training requirement and curriculum segment).

(4) Recurrent training syllabuses (not necessarily curriculum outlines) should be revised frequently (preferably annually). Operators must remove any unnecessary, outdated, superfluous, or inappropriate material and replace it with current and timely material. POI's should encourage operators to construct recurrent training curriculum segment outlines in a manner that allows for training syllabus variation in subsequent cycles of training, while not necessitating a new program approval (see paragraph 605).

(5) POI's shall encourage operators to use pretesting to identify areas in which crewmembers are deficient. While operators do not have to train in areas in which crewmembers demonstrate competence, they must, however, be able to identify areas with deficiencies and conduct training to proficiency in those areas.

603. TRAINING/CHECKING MONTH AND ELIGIBILITY PERIODS. Both Parts 121 and 135 require that for flight crewmembers to be scheduled or serve in revenue service, they must have completed various recurrent training and checking events within 12 calendar months. When an

operator adopts a modular approach for recurrent training, all such training elements and events must be grouped into specified modules to be administered and recorded as a recurrent training curriculum segment. When an operator does not adopt a modular training approach, records must be kept of each airman's accomplishment for each element of required training and each element or event must be scheduled separately. POI's should use the following direction and guidance when reviewing an operator's recurrent training and checking events.

A. *Training/Checking Month.* The training/checking month is that calendar month during which a flight crewmember is due to receive recurrent training. Calendar month means the first day through the last day of a particular month. PIC's conducting Part 121 operations or Part 135 IFR are also due a recurrent training or checking module 6 months after the training/checking month.

(1) *Designating the Training/Checking Month.* When a crewmember completes an initial, transition, upgrade, or requalification training program within a 3-calendar month period, the month in which the qualification curriculum segment is completed is then considered to be that crewmember's training/checking month. If the training has been completed within the 3-month period, the operator may make a single record of the entire curriculum without noting when individual events occurred. Subsequent scheduling of recurrent training may then be based on the training/checking month. If the time taken to complete initial, upgrade, transition, or requalification training has exceeded 3-calendar months, however, the operator must record and schedule the accomplishment of recurring events separately.

NOTE: The requirement that PIC's of turbojet aircraft must accumulate 100 hours in command is not considered for the purpose of establishing the 3-month period.

(2) *Adjusting the Training/Checking Month.* Operators may adjust a crewmember's training/checking month by administering a period of recurrent training and qualification. When training is accomplished before it is due, operators must ensure that all requirements are accomplished within the 12 calendar months allowed by the regulations. Requirements are sometimes omitted when an airman completes an initial-equipment, transition, or upgrade training curriculum at some time other than the previous eligibility period. When a training/checking month is adjusted, the reason for the adjustment must be

noted in the airman's record. A coding system for this adjustment may be used for computerized recordkeeping systems.

(3) *Requalification.* When an airman's qualification has lapsed due to not completing recurrent training or checking requirements, that airman must complete requalification training (see section 11 of this chapter). When an airman is entered into requalification training, a record of the reason for entry must be placed in the airman's record. The operator may establish a new training/checking month or retain the airman's original training/checking month after the airman successfully completes the requalification training.

B. *Eligibility Period.* The eligibility period is a 3-month period comprised of the calendar month before the month in which training is due, the month in which training is due, and the calendar month after the month in which training is due. In both Part 121 and Part 135 operations, required recurrent training or checking that is completed any time during the eligibility period is considered to have been completed during the month in which training is due. A crewmember who has not completed all recurrent training or checking requirements in the month due may be scheduled and may serve in revenue service during the remainder of the eligibility period, but not thereafter. A flight crewmember who fails to complete all required training and qualification modules within the eligibility period must complete requalification training before serving in revenue operations.

605. RECURRENT AIRCRAFT GROUND TRAINING CURRICULUM SEGMENTS. POI's must ensure that an operator's recurrent aircraft ground training consists of instruction in three subject areas: general operational subjects, aircraft systems, and systems integration training. Differences and special operations training (such as windshear) may also be required. FAR 121.427 and FAR 135.351 both require that recurrent aircraft ground training must contain instruction in the same subjects required for initial training. This requirement does not mean that each element of initial training must be reaccomplished during each period of recurrent training. It means that pertinent subject areas must be reaccomplished often enough to ensure that crewmembers remain competent in the performance of their assigned duties. The FAR's also require that certain subjects, such as emergency training be covered each year.

A. *Training Hours.* Ground training hours must be specified in the recurrent training curriculum segment. The number of training hours required for various aircraft and

the approval of training hours are discussed in section 5, paragraph 433 of this chapter. Operators may be required, however, to conduct more than the minimum number of hours specified by the regulations to achieve the training objective. FAR 121.427(a)(2) and FAR 135.351(a)(2) require that training in all subject elements which are required in initial aircraft ground training must be given "as necessary" in recurrent training. A recommended means of constructing recurrent training segments is to focus on one or two training modules within each subject area. During recurrent training, additional training modules may be accomplished at subsequent cycles of training until all of the areas of initial training have been completely reviewed. A complete cycle should not exceed 3 years.

B. *Differences and Special Operations Training.* When either aircraft differences training or special operations training is applicable, it must be included in recurrent training curriculums. This training may either be presented as a separate and distinct curriculum segment or the training may be integrated into other modules. An effective way for an operator to conduct differences training is to discuss the differences in individual systems and procedures as an integral part of the training. When special operations are conducted, special curriculum modules are normally required as opposed to integrating the training into other segments. Recurrent training should also include updated information on equipment, operational practices and procedures, information from accidents and incidents, and on areas which require emphasis as a result of line and proficiency check evaluations.

607. WRITTEN OR ORAL TESTING. POI's must ensure that the following written or oral testing requirements are in the operator's recurrent training curriculum.

A. Written or oral testing is a required module of the recurrent flight checks for both Part 121 and Part 135 curriculums. This testing may either be conducted in conjunction with the flight check module or separately. The testing must be accomplished within the airman's eligibility period (see previous paragraph 603.B).

NOTE: Although operators may use computer-based instruction, programmed instruction, or "open book" instruction and testing to obtain a reduction in ground training hours, this training/checking is not intended to be a substitute for the testing required in the qualification segment.

B. *Composition of Written and Oral Test Modules.* The oral or written test module must contain three distinct sets of test elements.

(1) The first set of test elements is general in nature and covers the applicable provisions of: Parts 61, 63, 91, 121, and 135; the operator's OpSpecs; and the operations manual. This segment only has to be completed once during each qualification cycle and does not need to be repeated if the crewmember is qualifying on more than one aircraft.

(2) The second set of test elements includes aircraft systems, operating procedures, weight and balance, and performance data relative to each specific make and model of aircraft. This segment of the test module must be completed on each make and model aircraft on which the airman is to serve. When the airman is qualifying to serve on more than one variation of an aircraft, a written or oral differences test segment is also required.

(3) The third set of test elements consists of special or unique operations. Special operations testing may be included in the general or aircraft specific segments, as appropriate.

609. RECURRENT GENERAL EMERGENCY TRAINING CURRICULUM SEGMENTS. Both Part 121 and Part 135 operators are required to conduct recurrent general emergency training. This curriculum segment is separate from the aircraft ground recurrent training curriculum segment. Recurrent general emergency training consists of emergency situation and emergency drill training modules. Section 4 of this chapter contains additional direction and guidance on the scope and content of general emergency training modules.

A. Recurrent general emergency training for Part 121 consists of all the items required by FAR 121.417. Recurrent general emergency training for Part 135 consists of all the items required by FAR 135.331. This training must be conducted every 12 months, typically at the same time recurrent aircraft ground training is conducted.

B. The emergency situation training modules that are part of the recurrent general training curriculum segment must include at least the following elements:

- Rapid depressurization (if applicable)
- Fire in flight (or on the surface) and smoke control procedures

- Ditching and evacuation situations
- Illness, injury, or other abnormal situations involving passengers or crewmembers

C. Part 121 crewmembers must complete emergency drill training at least once every 24 months. During alternate 12-month periods, training may be accomplished by the operator using pictorial presentations or demonstrations. Part 135 crewmembers must complete emergency drill training every 12 months. The emergency drill training modules that are part of the recurrent general emergency training curriculum segment must include at least the following events:

- Operation of each type of emergency exit in the normal and emergency modes

- Operation of each type of hand-held fire extinguisher
- Operation of each type of emergency oxygen system
- Donning, use, and inflation of each type of life preserver and the use of other flotation devices (if applicable)
- Ditching procedures (if applicable) including cockpit preparation, crew coordination, passenger briefing and cabin preparation, the use of lifelines, and the boarding of passengers and crewmembers into a liferaft or slideraft

D. The following illustration clarifies the chronological order of recurrent general emergency training requirements:

TABLE 3.2.10.1.
PART 121 RECURRENT GENERAL EMERGENCY TRAINING
TIMETABLE

TYPE OF RECURRENT GENERAL EMERGENCY TRAINING REQUIRED	MONTHS SINCE FIRST GENERAL EMERGENCY TRAINING CURRICULUM SEGMENT WAS COMPLETED			
	12 MONTHS	24 MONTHS	36 MONTHS	48 MONTHS
Emergency Situation Training	X	X	X	X
Emergency Drill (either hands-on or pictorial demonstration)	X		X	
Emergency Drill (hands-on required)		X		X

611. RECURRENT FLIGHT TRAINING AND QUALIFICATION CURRICULUM SEGMENTS - PART 121. POI's must refer to FAR's 121.431 and 121.443 when determining the various acceptable means that an operator may use to construct recurrent flight training and qualification curriculum segments. POI's should use the direction and guidance that follows when making these determinations.

A. FAR 121.433(c)(1)(i) requires that all pilots complete a flight training curriculum segment every 12 calendar months in each airplane in which the pilot is to serve. This regulation also requires that the applicable flight test (as prescribed in FAR 121.441) be

accomplished. The flight training and flight test requirements are separate and distinct but are both due in the pilot's training/checking month.

B. FAR 121.433(c)(iii) requires PIC's to complete a flight training module annually in addition to the module conducted in the airman's training/checking month. This module is due in the calendar month 6 months after the training/checking month.

C. FAR 121.433(c)(2) allows a course of simulator training described under FAR 121.409(b) to be substituted for alternate periods of recurrent flight training. A course of flight training in a simulator under FAR 121.409(b)(1)

consists of 4 hours at the controls practicing at least the procedures, maneuvers, and events in Appendix F. A course of flight training in a simulator under FAR 121.409(b)(3) consists of line oriented flight training (LOFT).

D. FAR 121.433(c)(2) permits an operator to conduct a proficiency check instead of recurrent flight training but does not authorize training instead of a required proficiency check. This provision is not intended to allow perpetual substitution of checking for training. POI's must emphasize that training is of primary importance, and checking is the means of verifying that training has been adequate. POI's shall ensure that operators conduct adequate refresher and remedial flight training in addition to conducting the required checks. The provision allowing for the substitution of checks for training is intended to allow the following:

- Realignment of a crewmember's training/checking month
- Relief for crewmembers requalifying after losing qualification

- Necessary flexibility for operators when realigning and revising training programs

E. FAR 121.441 requires that a PIC must have completed a proficiency check within the last 12 calendar months and either a proficiency check or one of the simulator courses of training described under FAR 121.409(b) within the last 6 calendar months.

F. FAR 121.441 requires an SIC to have completed a proficiency check or a course of simulator training described under FAR 121.409(b) every 12 calendar months. An SIC must also have completed a proficiency check or LOFT within 24 calendar months.

FYI: FAR 121.441 states that within the previous 6, 12, and 24 calendar months, crewmembers must complete specified requirements. FAR 121.401, however, allows an additional, calendar-month grace period for crewmembers to complete these requirements.

G. Table 3.2.10.2 that follows, contains a summary of the methods that a Part 121 operator may use to comply with the combined recurrent qualification requirements of the cited regulations.

TABLE 3.2.10.2.
METHODS FOR COMBINING RECURRENT TRAINING, PART 121

Months	0	6	12	18	24
PIC	P	P	P	P	P
	P	T or L	P	T or L	P
	P	P	L or T	P	L or T
SIC	P		P		P, L, T
	P		L		P, L, T
	P		T		P or L

P = Proficiency check in an airplane or simulator

L = LOFT

T = Simulator training

H. For recurrent training, flight engineers must have completed a proficiency check within 12 calendar months.

I. When a crewmember flies more than one aircraft type, the training/checking month for each subsequent airplane is the same calendar month that is one year after the original check on that type of airplane. Operators normally find it advantageous to align the training/checking month on the second airplane 6 calendar

months after the training/checking month on the first airplane. This arrangement permits the competency check for the second airplane to simultaneously count as the instrument proficiency check for the first airplane.

613. RECURRENT FLIGHT TRAINING AND QUALIFICATION CURRICULUM SEGMENTS - PART 135. The recurrent qualification check requirements for pilots in Part 135 operations are as follows:

A. Each pilot serving in a transport or commuter category airplane, turbojet airplane, or helicopter must have completed a competency check in each make and model of aircraft in which the pilot serves within 12 calendar months. Part 135 operators who operate these families of aircraft may comply with Subparts N and O of Part 121 instead of Subparts G and H of Part 135. A Part 135 operator who does comply with Subparts N and O of Part 121 is considered to be in full compliance with Subparts G and H of Part 135. POI's should encourage operators of transport category, turbojet, and commuter airplanes to adopt this option to take full advantage of advanced simulation and LOFT.

B. Each pilot serving in airplanes of the multiengine, general purpose aircraft family must have completed a competency check in one model of airplane of the equivalent aircraft family within 12 calendar months. A competency check in one airplane of an equivalent aircraft family qualifies the pilot in all airplanes of that family (see figure 3.3.7.8 for a listing of established equivalent aircraft families).

C. Each pilot serving in single-engine airplanes other than turbojets must have completed a competency check in any make and model of the aircraft family within 12 calendar months. Only one competency check is required to qualify the candidate in all single-engine airplanes of this family.

FYI: The provisions of previous subparagraphs B and C do not relieve a pilot from having to complete recurrent differences training and that portion of the oral or written competency test applicable to each make, model, and variation of the airplane that the pilot will operate as required by FAR 135.293(A)(2).

D. *Instrument Proficiency Check.* FAR 135.297 requires a PIC conducting IFR operations to have completed an instrument proficiency check in one aircraft in which the pilot serves, and within the preceding 6 calendar months. The competency test for IFR operations as described in section 7 of this chapter satisfies the requirements of an instrument proficiency check. A PIC is due an instrument proficiency check in the calendar month 6 calendar months after the training/checking month.

(1) FAR 135.297 specifies that the instrument proficiency check consists of those maneuvers and events required for original issuance of the certificate required for the operation being conducted (either ATP or commercial/instrument). The events required on an instrument proficiency check are discussed in section 7 of this chapter.

(2) FAR 135.297 allows a pilot operating both single-engine and multiengine aircraft to alternate the instrument-proficiency checks in the two classes of aircraft and be considered qualified in both classes. The pilot must, however, have completed an IFR check in a multiengine aircraft before beginning the alternating sequence. This provision does not, however, relieve the pilot from having to accomplish a competency check (as discussed in section 7 of this chapter) in each family of aircraft or, when required in each individual aircraft, once every 12 calendar months (see section 8, paragraph 549 of this chapter).

NOTE: FAR 135.297 was written before competency checks for IFR operations were required for operators to satisfy the requirements of FAR 135.297 as well as 135.293. The provision for alternating checks has little practical application under the current requirements.

E. *Autopilot Instead of SIC.* Before a PIC may be authorized to conduct IFR operations with an autopilot instead of an SIC, the PIC must satisfactorily demonstrate this ability once every 12 calendar months. This demonstration should be conducted in conjunction with an IFR competency check.

F. *Multiple Currency.* When a pilot flies two or more aircraft of different families, or aircraft requiring individual qualification, the pilot's training/checking month for each airplane or family of airplanes is the same calendar month 1 year after the original qualification on that aircraft or aircraft family. Operators will usually find it advantageous to align the training/checking month for the second airplane 6 calendar months after the training/checking month for the first airplane. This arrangement eliminates the need for separate instrument proficiency checks.

614. - 616. RESERVED.

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